

Impacts of Climate Change on Public Health in California

Safeguarding California: Preparing for Climate Risks
An Update to the 2009 Adaptation Strategy



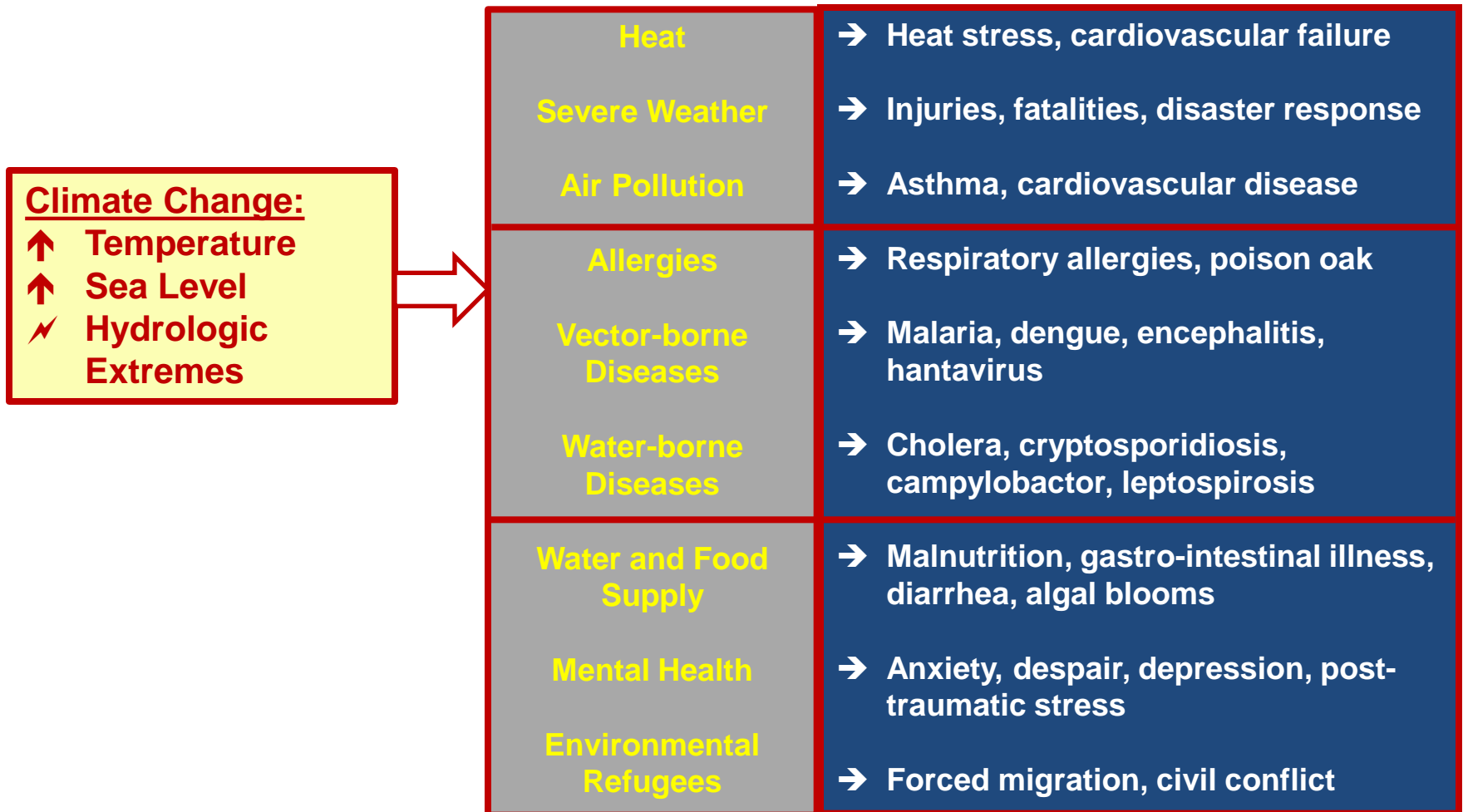
The Health of our State



CDPH Climate and Health Goals

- Provide leadership on the state Climate Action Team(CAT) workgroups and committees to protect and promote health and equity
- Develop CDPH's capacity to assess and respond to climate change throughout our public health programs and on specific climate risks
- Work with local public health departments and other partners to develop their capacity to address climate mitigation, readiness and resilience

Pathways for impacts on health (direct and indirect)



* Economic dislocation and hardship are system-wide impacts

Increasing Temperatures and Extreme Heat Events

- Heat illness and death
- Making other health problems worse
- Air pollution
- At high risk: elderly, isolated, very young, outdoor workers, those without access to cooling



Wildfire

- Injuries and death
- Displacement and loss of homes and jobs
- Air pollution (local and transported)
- Creates flooding and water quality problems



Extreme Weather, Storms and Flooding, Sea Level Rise, Warmer Water, Drought

- Injury, death, mental health impacts
- Displacement, loss of jobs, economic damage
- Creation of hazards (mold, toxins, water quality)
- Damage to health care facilities, service disruption
- Salt water incursion and decreased water quality
- Damaged infrastructure (sewage, water treatment, others)

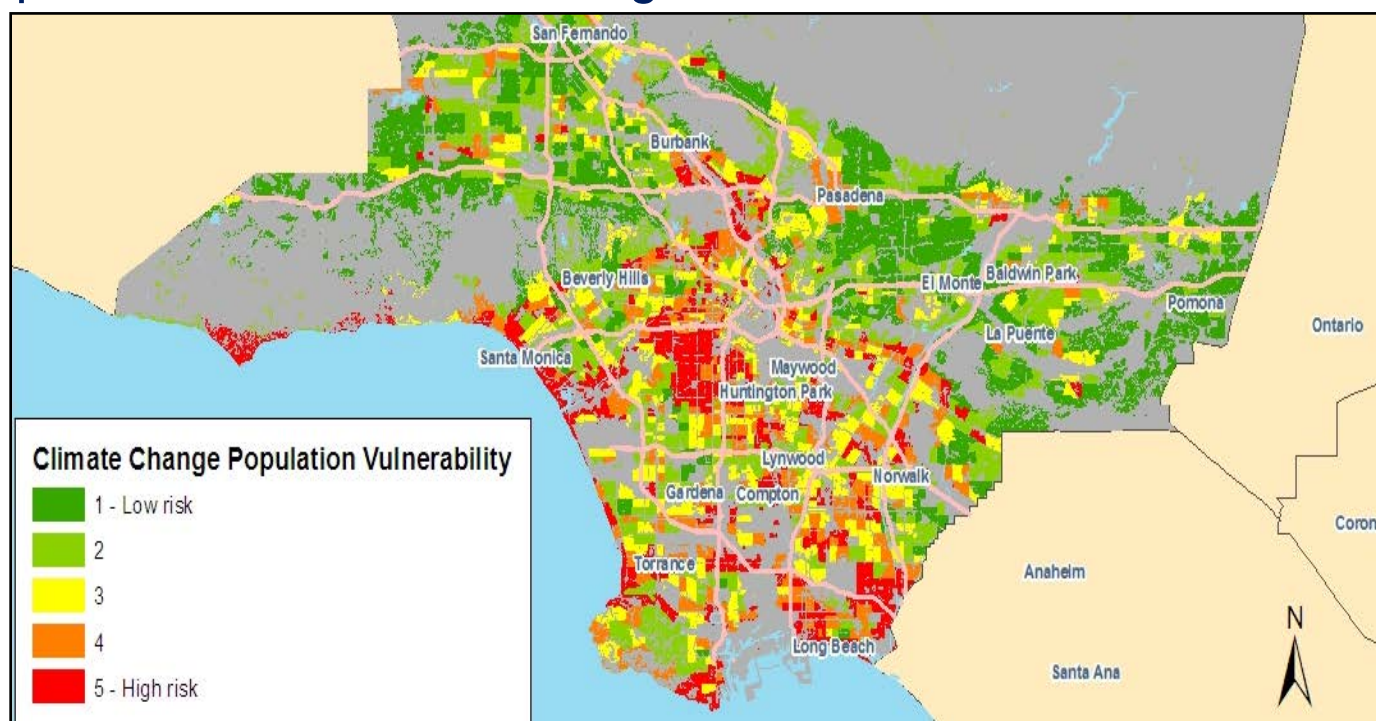


Public Health Priority Actions

- Developed “Preparing California for Extreme Heat: Guidance and Recommendations”
- Developing vulnerability assessment methods and tools
- Providing education and training on climate change as a public health issue
 - Within Public Health sector
 - To partners in other sectors
 - To the public
- Providing technical assistance to local health depts. to develop strategies and expand capacity

Assessing Vulnerability for Climate Planning

- **Climate change will impact all Californians but the most vulnerable will suffer the most**
- Climate change will magnify existing health inequities rooted in social determinants of health
- In LA County, more African-Americans and Latinos live in high risk areas compared to whites and average incomes are about 40% lower



Preparing California for Extreme Heat: Guidance and Recommendations

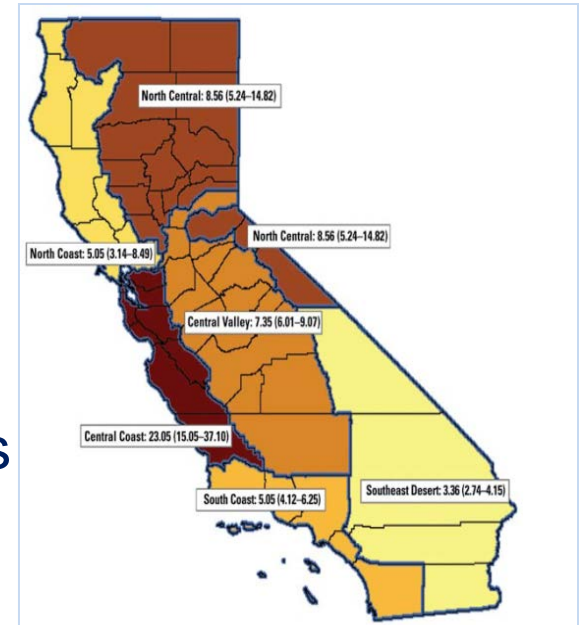
- California must become more heat resilient
- Many jurisdictions have heat response plans, but few currently address climate change and heat
- Multi-agency heat work group developed strategies and recommendations to reduce risk and promote heat resiliency to protect health
 - Improve heat preparedness and response plans for climate projections
 - Reduce risks in the built environment –materials, building codes, design, land use, cooler pavement
 - Address urban heat risks, urban greening
 - Assess and plan with/for vulnerable populations
 - Research needs

Public Health Surveillance and Assessment: Example Heat Waves

- Europe, 2003: nine day heat wave with > 70,000 deaths

Could it happen here?

- California, 2006
 - 655 excess deaths
 - 16,166 excess emergency room visits and 1,182 excess hospitalizations
 - \$133 million in health-care related costs
 - CA electrical grid/transmission lines threatened by wildfire risk; catastrophic during heat wave



Questions?

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